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EXAMINER

RIGGLEMAN, JASON PAUL

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/581,652
Filing Date: February 16, 2007
Appellant(s): CLASSEN ET AL.

Andre Pallapies
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 1/31/2011 appealing from the Office action mailed 8/10/2010.

(1) Real Party in Interest

The examiner has no comment on the statement, or lack of statement, identifying by name the real party in interest in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The following is a list of claims that are rejected and pending in the application:

Claims 11-21.

(4) Status of Amendments After Final

The examiner has no comment on the appellant's statement of the status of amendments after final rejection contained in the brief.

(5) Summary of Claimed Subject Matter

The examiner has no comment on the summary of claimed subject matter contained in the brief.

(6) Grounds of Rejection to be Reviewed on Appeal

The examiner has no comment on the appellant's statement of the grounds of rejection to be reviewed on appeal. Every ground of rejection set forth in the Office action from which the appeal is taken (as modified by any advisory actions) is being maintained by the examiner except for the grounds of rejection (if any) listed under the subheading "WITHDRAWN

Art Unit: 1711

REJECTIONS.” New grounds of rejection (if any) are provided under the subheading “NEW GROUNDS OF REJECTION.”

(7) Claims Appendix

(8) Evidence Relied Upon

EP 0777998A1	Tarplee et al.	06-1997
DE 3741652A1*	Hesse	12-1987

* English Machine translation attached.

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 11-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hesse (German Patent Publication No. DE3741652) in view of Tarplee et al. (EPO Patent Application Publication No. EP0777998A1).

Hesse teaches a dishwashing machine having a washing container (1). There is a device for washing items in the washing container using rinsing liquid, Fig. 1. The dishwashing machine is a closed-loop type in which drying is achieved by circulating air through a duct in which the air is first condensed by cooling then the fan (10) blows the air and then the dehumidified air is heated by a heater (13). The air loop has an inlet (7) leading to a desiccant-type condenser (11) which cools the air. The high-temperature, reduced moisture, air is returned to the washing chamber (2) by an inlet (8). Also, condensed water may return to the washing chamber via inlet (8).

Hesse does not teach the use of a desiccant sorber and a liquid to create a heat-pump in the cooling/heating duct of the air loop; however, Tarplee et al. teaches a domestic appliance having a container (D). There is a device for washing items retained in the washing container (D) using rinsing liquid. A medium-retaining container (water reservoir 12) for retaining a medium is taught. The medium (water) is a vaporisable medium or a sublimable medium. The medium can be subjected to at least one of an evaporation step and sublimation step; whereby the medium is cooled. A sorber (absorber/desorber 10) is taught in the form of a reversibly dehydratable material (pg. 2, Lines 26-38). The sorber and the medium-retaining container are communicated with one another (via control conduit 14) such that gas exchange can take place therebetween, see Figs. 1-2 (inserted into text, above). The reversibly dehydratable material acting to absorb vapor that has flowed from the medium-retaining container acting to absorb

Art Unit: 1711

vapor that has flowed from the medium-retaining container into the sorber. The reversibly dehydratable material transforms from a dehydrated state into a hydrated state. The reversibly dehydratable material is restorable from a hydrated state into a dehydrated state by the application of thermal energy to the reversibly dehydratable material (via heater 17), Fig. 2. The sorber is operable to “*directly dry*” items retained in the washing container. The sorber is capable of providing the thermal energy for desorbing the sorber such that at least one of the rinsing liquor and the items located in the washing container are heated. The gas exchange pipe has a valve for selectively permitting the flow of vapor through the exchange pipe (pg. 3, Lines 8-10). An electric heating element (17) is located “in” the sorber for desorption of the reversibly dehydratable material. When the electric heating element is switched off and the valve is opened the medium can be vaporized or sublimed in the medium-retaining container and the medium-retaining container with medium can be cooled by the latent heat of evaporation. The medium vapor is passed via the exchange pipe to the sorber and the medium vapor is absorbed by the reversibly dehydratable material in the sorber whereby the sorber is heated with reversibly dehydratable material. When the electric heating element is switched on for desorbing the sorber, the sorber is heated and, when the valve is opened, the medium bound in the sorber is evaporated. The medium vapor released in the sorber is passed to the medium-retaining container by means of an exchange pipe and the medium vapor is condensed in the medium-retaining container whereby the medium-retaining container with medium is heated as a result of the latent heat of evaporation. The medium-retaining container is communicated via an outlet with the container. The sorber is communicated with the container via an inlet. The medium-retaining container and the sorber are communicated with one another by an air guiding pipe

Art Unit: 1711

such that the air can be guided from the washing container to the medium-retaining container. The air is cooled upon contact with the cooled medium in the medium-containing container. The cooled air is subsequently guided into contact with the reversibly dehydratable material in the sorber. The air is heated by the sorber and can be guided back into the washing container during a drying step. The air at the medium-retaining container is cooled and the moisture contained in the air is condensed and the air at the sorber is heated to increase the moisture capacity of the air. The medium-retaining container is communicated via an outlet with the washing container. The sorber is communicated with washing container via an inlet. The medium-retaining container and the sorber are communicated with one another by an air guiding pipe such that the air can be guided from the washing container to the medium-retaining container whereupon the air is cooled upon contacted with the cooled medium in the medium-retaining container. The cooled air is subsequently guided into contact with the reversibly dehydratably material in the sorber. The air is heated and the heated air can be guided back into the washing container through the inlet. The medium-retaining container and the sorber are arranged in the direction of flow of the air from the washing container to allow heat exchange between the flowing air and the medium-retaining container and the reversibly dehydratable material in the sorber, Fig. 4. It would have been obvious to one of ordinary skill in the art the time of the invention to modify Hesse with Tarplee et al. to create a dishwashing machine with a closed-loop drying system which saves energy to achieve the expected result (see Tarplee et al., pg. 2, Lines 23-25).

(10) Response to Argument

The Appellant's argues that Hesse teaches the use of a heat exchanger within a dishwasher for reducing moisture in a closed system after the dishes have been washed and the

Art Unit: 1711

cleaning water drained. The Appellant states that the use for reducing moisture and time after the dishes have been washed teaches away from the assessment in the Advisory Action.

Appellant argues that the Hesse heat exchanger is not taught to be applied to heating rinsing liquid with the thermal energy used for desorbing the claimed sorber as claimed (page 7 of Appeal Brief).

Examiner states that the arguments are not commensurate in scope with the claims. The claims state that "to provide the thermal energy used for desorbing the sorber such that at least one of the rinsing liquor and the items located in the washing container are heated thereby".

First, Examiner notes that this appears to be intended use in the form of a method step and the invention is an apparatus. Nevertheless, the claim requires that either the rinsing liquor **or** the items located in the washing container are heated. In Hesse, the items in the washing container are heated by the heated air -- since the air (see heater at 13) is returned to the wash container (1), see Figure. This was stated in the Advisory Action, dated 12/29/2010, that "since the heat exchanger heats the air which is circulated it follows that the items in the container are necessarily heated". The rejections are maintained.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Jason P Riggleman/

Examiner, Art Unit 1711

Application/Control Number: 10/581,652
Art Unit: 1711

Page 8

Conferees:

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